

CLAIMS:

1. Solid bowl screw centrifuge having a screw (3) which can be rotated at a differential rotational speed relative to the drum (2), the drum (2) having a solids discharge (8) at its preferably conical end, and having, at its end situated opposite the conical end, at least one or more weir-type discharge openings (11) arranged with an axial drum lid (9), and a centripetal chamber section (12) being connected behind the drum lid (9) with the discharge openings (10), in which centripetal chamber section (12) a centripetal pump (13) is arranged for discharging the liquid phase from the solid bowl screw centrifuge (1), characterized in that an adjustable throttling device (17) is connected in front of the centripetal pump (13) in the centripetal chamber section, the throttling device (17) being assigned to or connected behind the discharge openings.

2. Solid bowl screw centrifuge according to Claim 1, characterized in that the throttling device (17) can be adjusted during the operation as the drum is rotating.

3. Solid bowl screw centrifuge according to Claim 1, characterized in that the throttling device (17) permits a continuous adjusting of the pool depth.

4. Solid bowl screw centrifuge according to Claim 1, characterized in that a baffle plate (6) is arranged on the screw (3).

5. Solid bowl screw centrifuge according to one of Claims 1 to 2, characterized in that the throttling device (17) is constructed as an element which is stationary during the operation.

6. Solid bowl screw centrifuge according to one of Claims 1 to 3, characterized in that the throttling device (17) is constructed as an element which rotates during the operation, particularly with the drum (2).

7. Solid bowl screw centrifuge according to Claim 3 or 4, characterized in that the throttling device (17) has at least one or more movable disk elements, slide elements and/or pneumatically or hydraulically operable bellows or membrane elements which are preferably assigned directly to the individual discharge openings.

8. Solid bowl screw centrifuge according to Claim 3 or 4, characterized in that the throttling device is constructed as a throttle disk (17) arranged in the centripetal chamber section (12), connected behind the discharge openings and connected in front of the centripetal pump (13).

9. Solid bowl screw centrifuge according to Claim 6, characterized in that the throttle disk has an axially movable construction.

10. Solid bowl screw centrifuge according to one of the preceding claims, characterized in that the throttle disk (17) has a swivellable construction.

11. Solid bowl screw centrifuge according to one of the preceding claims, characterized in that the throttle disk is movable by means of at least one connecting rod (18) which is penetrated by a stationary feeding pipe (10), which is non-rotatable during the operation, or by a component connected with the feeding pipe (10).

12. Solid bowl screw centrifuge according to one of the preceding claims, characterized in that the throttle disk is displaceably guided on the feeding pipe (10) and/or the centripetal pump (26).

13. Solid bowl screw centrifuge according to one of the preceding claims, characterized in that the throttle disk (17) can be moved between the centripetal pump (13) and the discharge openings (11).